IN THE CLAIMS

Claims 1-83 (Cancelled)

84. A method for flexible and secure transmission of digital content to an end user device, the method comprising:

providing a control center for controlling access to the digital content by the end user device;

transmitting scrambled digital content to a first end user device by a second end user device, such that said second end user device cannot play back said scrambled digital content;

connecting said second end user device to said control center; and

transmitting a permission message to said second end user device by said control center, such that said second end user device is able to unscramble said scrambled digital content to form unscrambled digital content.

85. The method of claim 84, wherein transmitting said scrambled digital content includes:

transmitting a first set of information for decoding said scrambled digital content to said second end user device; and

permitting said second end user device to access said first set of information only if said permission message is given to said second end user device.

86. The method of claim 85, wherein said first set of information is distributed with said scrambled digital content.

87. The method of claim 85, wherein said first set of information is distributed by said control center.

88. The method of claim 85, wherein transmitting said scrambled digital content includes contacting said control center by said second end user device to receive said permission message.

89. The method of claim 85, wherein said first set of information includes an address of said control center.

90. The method of claim 85, wherein said first set of information enables said unscrambled digital content to be permanently stored by said second end user device.

91. The method of claim 85, wherein said first set of information enables said unscrambled digital content to be permanently stored by said second end user device.

92. The method of claim 84, wherein said first and said second end user devices belong to a group of a plurality of end user devices, such that said permission message is sent to each end user device belonging to said group.

93. The method of claim 92, wherein membership in said group is at least partially determined according to communication between said end user devices.

94. The method of claim 93, wherein transmitting said permission message further comprises transmitting a token from said first end user device to said second end user device, for including said first and said second end user devices in said group.

95. The method of claim 94, wherein transmitting said token is performed repeatedly for the plurality of end user devices in the group until a limit is reached.

96. The method of claim 95, wherein said limit is determined according to a number of end user devices in the group, such that if said number of end user devices exceeds a maximum permitted number, transmitting said scrambled digital content and transmitting said permission message are not performed for an additional end user device.

97. The method of claim 96, wherein said limit is determined according to at least one reasonableness rule.

98. The method of claim 95, wherein said limit is determined according to at least one reasonableness rule and wherein said at least one reasonableness rule restricts a number of copies of said scrambled digital content operable with said token.

99. The method of claim 98, wherein when said limit is reached, at least one of transmitting said scrambled digital content and transmitting said permission message is not performed.

100. The method of claim 98, wherein said at least one reasonableness rule requires at

least said first end user device to wait for a predetermined period before transferring said scrambled digital content to an additional end user device in the group.

101. The method of claim 98, wherein said at least one reasonableness rule requires said second end user device to wait for a predetermined period before transferring said scrambled digital content to an additional end user device in the group, said predetermined period being greater for said second end user device than for said first end user device.

102. The method of claim 98, wherein said period is at least partially determined according to a period of time.

103. The method of claim 98, wherein said period is at least partially determined according to operation of said end user device a minimum number of times.

104. The method of claim 92, wherein membership in said group is at least partially determined according to said control center, such that if said group has more than a predetermined number of end user devices as members, said control center blocks receipt of said permission message by members of said group.

105. A method for securing digital content for transmission to an end user device, comprising:

providing a control center for controlling access to the digital content by the end user device;

transmitting scrambled digital content to the end user device, such that the end user

device cannot play back said scrambled digital content;

transmitting a PECM (personal ECM) to the end user device by said control center, said PECM being specific to the end user device; and

unscrambling said scrambled digital content by the end user device according to said PECM.

106. The method of claim 105, wherein transmitting said PECM further comprises:

transmitting a first set of information in an ECM (entitlement control message) for decoding said scrambled digital content to the end user device;

permitting the end user device to access said first set of information only if an entitlement management message (EMM) is given to the end user device and said EMM indicates that the end user device is permitted to use said ECM; and

unscrambling said scrambled digital content by the end user device according to said first set of information.

107. The method of claim 106, wherein said EMM is transmitted by said control center.

108. The method of claim 106, further comprising:

replacing said ECM with said PECM for unscrambling said scrambled digital content by the end user device.

109. The method of claim 106, wherein said first set of information includes at least one instruction for generating a code word, such that permitting the end user device to access said first set of information includes:

generating said code word according to said at least one instruction; and

unscrambling said scrambled digital content according to said code word.

110. The method of claim 105, further comprising:

permanently associating said PECM with said scrambled digital content to permit unscrambling of said scrambled digital content by the end user device.

111. The method of claim 110, further comprising:

transmitting said scrambled digital content with said ECM from a first end user device to a second end user device;

receiving a specific PECM by said second end user device from said control center; and

unscrambling said scrambled digital content by said second end user device only after receiving said specific PECM.

112. The method of claim 111, wherein receiving said specific PECM by said second end user device includes:

transmitting payment to said control center; and

transmitting said PECM by said control center only after receiving payment.

113. A system for securing digital content for transmission, comprising:

(a) an end user device for receiving scrambled digital content and for unscrambling said scrambled digital content for playing back the digital content;

(b) a broadcast unit for transmitting said scrambled digital content to said end user device;

(c) a permission message generator for generating a permission message for transmission to said end user device, such that said end user device unscrambles said scrambled digital content only after said permission message is at least received by said end user device, said permission message being specific for said end user device; and

(d) a subscription management system for controlling said permission message generator to determine whether said permission message is generated.

114. The system of claim 113, further comprising:

(e) a network for connecting said end user device, said broadcast unit, said permission message generator and said subscription management system.

115. The system of claim 113, wherein said permission message generator sends said permission message to said subscription management system, and said subscription management system transmits said permission message to said end user device.

116. The system of claim 113, wherein said permission message generator further comprises:

1) an ECM (entitlement control message) generator for generating an ECM, said ECM forming a portion of said permission message; and

(ii) a PECM (personalized ECM) generator for generating a PECM, said PECM being specific to said end user device, said PECM forming another portion of said permission message.

117. The system of claim 116, wherein said end user device further comprises a security module for receiving said ECM and said PECM, and for unscrambling said scrambled digital content for playing back the digital content upon receipt of at least one of said ECM and said PECM.

118. The system of claim 117, wherein said security module further comprises a renewable security submodule, said renewable security submodule being removable and replaceable.

119. The system of claim 118, wherein said renewable security submodule comprises a smartcard.

120. The system of claim 117, wherein said security module features a limited number of slots for being associated with a plurality of ECMs, such that if said limited number of slots are used, a PECM corresponding to at least one stored ECM must be received before an additional ECM is received by said end user device.

121. The system of claim 120, wherein information concerning said slots is stored on said security module.

122. The system of claim 119, further comprising a smartcard reader for reading said smartcard, said smartcard reader being separate from said end user device, such that data produced by said smartcard is readable by said smartcard reader, including data resulting from said slots, said data being readable as a coded reply.

123. A method for unscrambling scrambled content before display, the scrambled

content being digital data and the unscrambled content being displayed as an analog signal, the method comprising:

unscrambling the scrambled content to form unscrambled content as digital data;

converting said unscrambled content from digital data to an analog signal, such that unscrambling and converting are performed immediately before said analog signal is displayed; and

displaying said analog signal; wherein unscrambling and converting are performed at physically separated locations connected by a secure channel.

124. A method for secure distribution of digital content between end user devices, comprising:

receiving scrambled digital content by a first end user device;

receiving a permission message for unscrambling said scrambled digital content by said first end user device;

transferring said scrambled digital content directly from said first end user device to a second end user device; and

unscrambling said scrambled digital content by said second end user device only after said permission message is activated for said second end user device.

125. The method of claim 124, wherein at least said second end user device is in communication with a control center and said permission message is activated for said second end user device by said control center.

126. The method of claim 124, wherein said first and said second end user devices belong to a group of a plurality of end user devices, such that said permission message is sent to each end

user device belonging to said group.

127. The method of claim 126, wherein membership in said group is at least partially determined according to communication between said end user devices.

128. The method of claim 127, wherein receiving said permission message further comprises transmitting a token from said first end user device to said second end user device, for including said first and said second end user devices in said group.

129. The method of claim 128, wherein transmitting said token is performed repeatedly for the plurality of end user devices in the group until a limit is reached.

130. The method of claim 129, wherein said limit is determined according to a number of end user devices in the group, such that if said number of end user devices exceeds a maximum permitted number, receiving and transferring are not performed for an additional end user device.

131. The method of claim 130, wherein said limit is determined according to at least one reasonableness rule.

132. The method of claim 129, wherein said limit is determined according to at least one reasonableness rule and wherein said at least one reasonableness rule restricts a number of copies of said scrambled digital content operable with said PECM.

133. The method of claim 132, wherein when said limit is reached, at least one of receiving

and transferring is not performed.

134. The method of claim 132, wherein said at least one reasonableness rule requires at least said first end user device to wait for a predetermined period before transferring said scrambled digital content to an additional end user device in the group.

135. The method of claim 132, wherein said at least one reasonableness rule requires said second end user device to wait for a predetermined period before transferring said scrambled digital content to an additional end user device in the group, said predetermined period being greater for said second end user device than for said first end user device.

136. The method of claim ~~132~~ 135, wherein said period is at least partially determined according to a period of time.

137. The method of claim ~~132~~ 135, wherein said period is at least partially determined according to operation of said end user device a minimum number of times.

138. The method of claim 125, wherein membership in said group is at least partially

determined according to said control center, such that if said group has more than a predetermined number of end user devices as members, said control center blocks receipt of said permission message by members of said group.

139. The method of claim 124, wherein unscrambling comprises:

purchasing the digital content; and

activating said permission message for said second end user device.

140. The method of claim 124, wherein said permission message is operative only by said first end user device, such that if said permission message is transferred to said second end user device by said first end user device, said permission message cannot be used by said second end user device.

141. A secure precision digital to analog converter, comprising:

(a) an encryption engine;

(b) a digital to analog converter for accepting input from said encryption engine for performing digital to analog conversion, said input including encrypted digital content and a key for decrypting said encrypted digital content; and

(c) a secure channel for connecting said encryption engine to said digital to analog converter, wherein said encryption engine is physically separated from said digital to analog converter.

142. The converter of claim 141, wherein said digital to analog converter further comprises:

(i) a plurality of weighted resistors; and

(ii) a plurality of control registers for controlling a weight of each resistor, said plurality of control registers determining said weight according to said key.

143. The converter of claim 142, wherein at least one weight of said weighted resistors is a fractional weight.

144. The converter of claim 141, further comprising an additional channel for transferring said encrypted digital content, such that said secure channel transfers said key.

145. The converter of claim 144, wherein said additional channel and said secure channel share identical physical lines.

146. A method for secure transmission of scrambled content to an end user device, the scrambled content comprising digital data, the method comprising:

transmitting the scrambled content to the end user device;

receiving a permission message by the end user device;

unscrambling the scrambled content to form unscrambled content as digital data only after receiving said permission message by the end user device;

converting said unscrambled content'to rescrambled content;

unscrambling said rescrambled content when converting said content from digital data to an analog signal, such that receiving and unscrambling are performed immediately before said analog signal is displayed; and

displaying said analog signal.

147. A secure precision digital to analog converter.

148. A method for securely and precisely converting scrambled data to a final format for display, performed within a secure device, the method comprising:

completely unscrambling the scrambled data to an unscrambled format of data; and

immediately converting said data in said unscrambled format to the final format for display, such that unscrambling and converting are performed within the secure device, and such that said data in said unscrambled format is inaccessible externally to the secure device.

149. The method of claim 148, wherein converting scrambled data to the final format for display includes conversion of digital data to an analog signal.

150. The method of claim 148, wherein unscrambling further comprises:

receiving the scrambled data;

unscrambling the scrambled data to a first unscrambled data;

rescrambling said first unscrambled data to form rescrambled data; and

unscrambling said rescrambled data to form said data in said unscrambled format of data.

151. The method of claim 150, wherein the scrambled data is distributed to a plurality of secure devices, and wherein rescrambling and unscrambling are performed according to a different scheme by each secure device.

152. The method of claim 151, wherein rescrambling said first unscrambled data to form said rescrambled data is performed differently by each secure device for each unscrambling operation.

153. In a system for secure distribution of digital content, the system comprising a control center for distributing at least one key for unscrambling scrambled digital content and an end user device for receiving the scramble digital content, a method for providing temporary access to received scrambled digital content, the method comprising:

sending a temporary key from the control center to the end user device, said temporary key being valid for a limited period of time;

receiving the scrambled digital content by the end user device; and

unscrambling the scrambled digital content by the end user device according to said temporary

key, such that the end user device is only permitted to unscramble the scrambled digital content while said temporary key is valid.

154. The method of claim 153, further comprising:

receiving a permanent key by the end user device from the control center;

replacing said temporary key with said permanent key; and

unscrambling the scrambled digital content by the end user device according to said permanent key, such that the end user device has permanent access to the scrambled digital content.

155. A method for securing digital content for transmission to a plurality of end user devices, said plurality of end user devices being members of a group, the method comprising:

transmitting scrambled digital content to a first end user device, such that said first end user device cannot play back said scrambled digital content;

transmitting a PECM (personal ECM) to said first end user device, said PECM being specific to the group of end user devices;

transmitting said scrambled digital content from said first end user device to a second end user device, such that said second end user device cannot play back said scrambled digital content;

transmitting said PECM (personal CM) to said second end user device; and

unscrambling said scrambled digital content by said first and said second end user devices according to said PECM.

156. The method of claim 155, wherein a control center controls access to the digital

content by the group of end user devices, and wherein said PECM is sent at least to said first end user device by said control center.

157. The method of claim 155, wherein said PECM is sent from said first end user device to said second end user device.

158. The method of claim 155, wherein transmitting said scrambled digital content and transmitting said PECM are performed repeatedly for the plurality of end user devices in the group until a limit is reached.

159. The method of claim 158, wherein said limit is determined according to a number of end user devices in the group, such that If said number of end user devices exceeds a I maximum permitted number, transmitting said scrambled digital content and transmitting said PECM are not performed for an additional lend user device.

160. The method of claim 159, wherein said limit is determined according to at least one reasonableness rule.

161. The method of claim 158, wherein said limit is determined according to at least one reasonableness rule and wherein said ate least one reasonableness rule restricts a number of copies of said scrambled digital content operable with said PECM.

162. The method of claim 161, wherein when said limit is reached, at least one of transmitting said scrambled digital content end transmitting said PECM is not performed.

163. The method of claim 162, wherein said at least one reasonableness rule requires at least said first end user device to wait for a predetermined period before transferring said scrambled digital content to an additional d user device in the group.

164. The method of claim 163, wherein said period is at least partially determined according to a period of time.

165. The method of claim 163, wherein said period is at least partially determined according to operation of said end user device a minimum number of times.